

### **REMARKS/ARGUMENTS**

In response to the requirement for restriction under 35 U.S.C. §§ 121 and 372, Applicants elect Group I (claims 1, 2, and 14) for further prosecution.

However, the requirement is respectfully traversed.

As an initial matter, it is noted that new claim 22 and the claims dependent therefrom combine features of the claims from Groups I and II while new claim 29 combines features of the claims of Groups I, II and V. These newly added claims should also be examined with the elected Group I.

Independently, however, the restriction requirement should be withdrawn because the pending claims form a single generic inventive concept under PCT Rule 13.1.

The subject claims have the common inventive and technical feature of producing a nanoporous silica gel from which it is possible to achieve a ligand loading in the pores as high as about 7.5 mmole ligand per gram of silica gel. This is not possible in the prior art, including Matsui et al, U.S. 5,380,510. The respective processes have in common the feature that the reaction steps, including one or more of gelling, reacting and maintaining, are carried out under conditions which substantially prevent pore collapse or cross-linking which would interfere with the achievement of the high ligand loading densities which are characteristic of the products and processes (making and using) according to the invention. Stated differently, the common concept linking the various groupings is that the process and the products resulting therefrom involve reacting a ligand group to surface silanol groups before the silanol groups react with each other (cross-link) during drying, thereby enabling previously unachievable ligand loading levels.

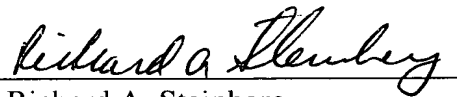
Accordingly, there is a unity of invention insofar as all of the claimed inventions are based, at least in part, on the loading of surface functional groups prior to a substantial loss of surface silanol groups due to aging and drying. The unique technical feature for achieving this "unity" in terms of the product, methods and processes include, avoiding the loss of surface silanol groups by either using a freshly prepared wet gel (the two-phase method) under prescribed conditions or to compatibilize and hydrolyze a coupling reagent with silica sol prior to gelation (one-phase process).

Therefore, reconsideration of the requirement for restriction and allowance of the subject application is earnestly solicited.

Should any issues remain unresolved, the Examiner is encouraged to contact the undersigned attorney for Applicants at the telephone number indicated below in order to expeditiously resolve any remaining issues.

Respectfully submitted,

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